R E M A R K S

In response to the Office Action mailed July 11, 2003, independent claims 1 and 11 have been amended to more clearly define applicants' invention. Amended independent claims 1 and 11, each now recites that the power level of the desensitization signal is adjusted based on the operating parameters of the wireless communication system so that the mobile unit maintains a sufficiently high transmission power level at a handoff boundary to overcome potential interference. See amended claims 1 and 11. No new matter has been added.

Applicants' invention is directed to a method and system for desensitizing the base station receiver. This is accomplished by injecting a so-called "desensitization" signal onto the receive path of the wireless receiver without attenuating the received signal down towards the noise level. This desensitization signal can take a variety of forms, such a broadband noise, a continuous eave signal, a modulated signal or a digital pseudo-random noise sequence. In many cellular communication systems, the power level transmitted by mobile units is controlled by the serving base station. This is done so that the mobile unit transmits the lowest power level necessary to maintain a good quality link to the base station. However, it may be desirable to reduce the sensitivity of the wireless receiver at the base station so that the base station believes that the mobile unit is farther away that it really is. Desensitizing the base station receiver results in the mobile unit maintaining a higher power level than it normally would at a handoff boundary to overcome potential interference.

In the present Office Action mailed July 11, 2003, claims 1-3, 5, 7-12 and 14-16 have been rejected under 35 U.S.C. §102(a) as being anticipated by Soliman. Claims 4 and 13 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Soliman in view of Hall et al. Claims 6 and 17 have been objected to as being dependent upon a rejected base claims. The Examiner, however, has indicated that claims 6 and 7 would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims.

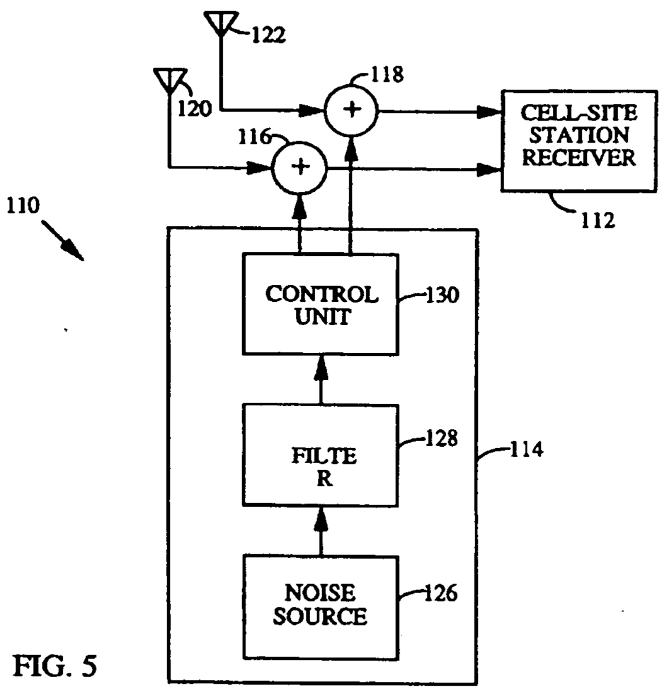
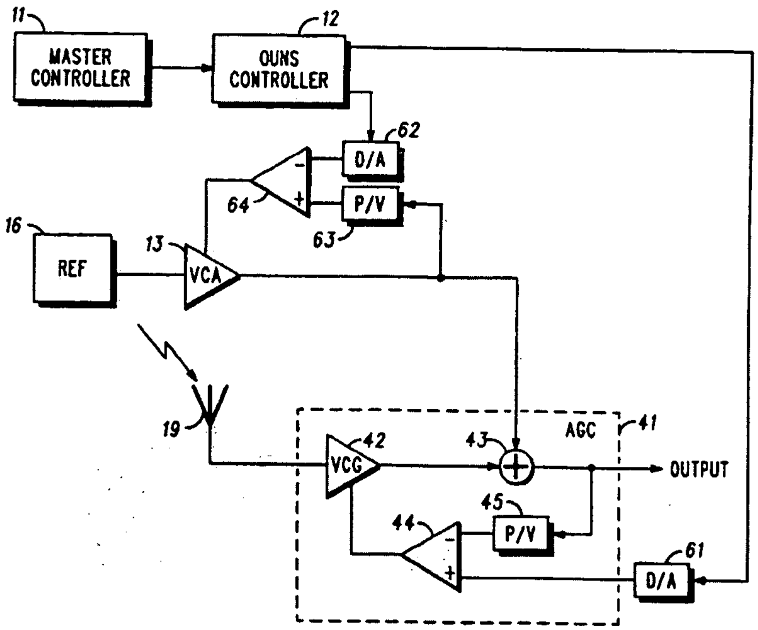


FIG. 5

In contrast to applicants' invention, Soliman discloses a method and apparatus for simulating the effect of signal interference by injecting white Gaussian noise in a cell-site station receiver. Referring to Fig. 5 of Soliman, reproduced herein above, a simplified block diagram of the receive section

(110) of an exemplary cell-site station is shown. The receive section (110) includes a cell-site station receiver (112) as well as a interference simulation apparatus (114) designed to simulate the interference created by subscriber units in cells proximate the cell in which the cell-site under test is located. The interference signal produced by the simulation apparatus (114) is combined in summers (116) and (118) together with signals received from cell-site station antennas (120, 122), respectively. The simulation apparatus (114) includes a noise source (126) for generating interference noise of a predefined density. The noise signal is then passed to control unit (130) and adjusted by an adjustable attenuator to provide the desired amount of simulated interference.



Similarly, Hall et al. discloses an "Other User Noise Simulator (OUNS)." Again, in evaluating communication systems it is may be necessary to simulate the noise that would be present if the system were loaded to various capacities. Hall et al. discloses a receiver having an OUNS for effecting such a simulation. Referring to Fig. 4 of Hall et al., reproduced herein above, the receiver (40) contains an automatic gain control (AGC) (41) consisting of voltage control gain (VCG) device ((42) coupled to an input from the antenna (19). The output of the VCG (42) is coupled to a first input mixer (43). A second input of the mixer (43) is coupled to the output of VGA (13). The output of the mixer (43) provides the output for the AGC (41) as well as to one input of an operational amp (Op Amp) (44) through a power-to-voltage (45). A second input to the Op Amp (44) is provided from an OUNS controller (12) through a D/A converter (61).

In operation, the AGC (41) normalizes the RF input signal to a known voltage or power level that is feed to an A/D converter. For example, if 50% loading is desired, the OUNS would contribute 50% of noise power to the demodulator. The AGC (41) would adjust all power received at the input to contribute 50% signal power to the demodulator. In effect, the received signal is provided to an automatic gain controller which normalizes the received signal to a known voltage level, along with a noise signal representing a desired noise level that simulates a desired loading.

As amended, applicants' claimed invention requires adjusting the power level of the desensitization signal based on the system operating parameters of the wireless communication system so that the transmitted power level of the mobile unit is sufficiently high at a handoff boundary to overcome potential interference.

In contrast, both Soliman and Hall et al. simply teach how to simulate the noise that would be present if a wireless communication were loaded to various capacities. During testing, the injected noise is set depending on the simulated loading desired. The injected noise is not adjusted based on the actual operating parameters of the communication system, but rather on what the user wants them to be during testing. Nor is the transmission power level of the mobile unit maintained higher than normal at a handoff boundary. This should not be surprising since the same problem sought to be solved by both Soliman and Hall et al. is substantially different than that sought to be solved by applicants. Applicants desensitize the receiver so as to raise the transmission power level of the received signal from the mobile unit. As such, this ensures that the mobile unit transmits a sufficiently high signal power level at a handoff boundary. Both Soliman and Hall et al., merely attempt to simulate interference

for testing purpose. The transmission power level of the mobile is unaffected. That is, because Soliman and Hall et al. each is merely simulating different loadings, there is no need for mobile units to adjust their transmission power.

Applicants respectfully submit that their claimed invention, as amended, is nowhere remotely shown, suggested or taught in either Soliman or Hall et al. Neither reference, individually or in combination, meets all limitations of the claims. Nor is their claimed invention suggested by either Soliman or Hall et. al.

In view of the remarks above, applicants believe independent claims 1 and 11 to be allowable under 35 U.S.C. §§102,103. Since independent claims 1 and 11 are allowable, it is believed that dependent claims 2-10 and 12-17 are also allowable.

Since this application is believed to be in condition for allowance, reconsideration and allowance are respectfully solicited.

Respectfully Submitted,
Attorney For Applicants

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John G. de la Rosa (Reg. No.)
375 Upper Mountain Avenue
Montclair, NJ 07043
Tel: (973) 233-0420
Fax: (973) 233-0421